

Kn)

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

2005 SApplicant

: Stephen PALM

Group Art Unit: 2631

Appl. No.

: 10/657,272

Examiner: Dung X. NGUYEN

Filed

: September 9, 2003

Confirmation No.: 3282

For

: ACTIVATION OF MULTIPLE XDSL MODEMS WITH IMPLICIT

**CHANNEL PROBE** 

### **COMPLETION OF RECORD**

Commissioner for Patents
U.S. Patent and Trademark Office
Customer Service Window, Mail Stop ISSUE FEE
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Sir:

In accordance with the duty of disclosure under 37 C.F.R. §1.56 and §§1.97-1.98, Applicant hereby calls to the Examiner's attention the following document:

A copy of a European Office Action mailed in related European Patent Application No. EP 03 028 106.7 on January 20, 2005 is enclosed, in which the following documents were cited:

"ITU-T Recommendation V.8 bis ("Procedures for the Identification and Selection of Common Modes of Operation Between Data Circuit-Terminating Equipment (DCEs) and Between Data Terminal Equipments (DTEs) Over the General Switched Telephone Network and On Leased Point-to-Point Telephone-

P24109.A13

Type Circuits"), which was published by the International Telecommunication

Union in August, 1996;

U.S. Patent No. 5,493,609 to DAVIS et al., which issued on February 20,

1996; and

An article by K. KRECHMER at pages 63, 64 and 66 of Data

Communications, McGraw Hill, NY, Vol. 23, No. 2 (January 21, 1994), entitled

"V.34 Modems: Off to a Fast Start?."

Applicant notes that all of the above-noted documents were previously

cited in an Information Disclosure Statement, and thus, copies are not being

provided herewith. However, Applicant has enclosed a copy of the European

Office Action to complete the record.

Should the Examiner have any questions, the Examiner is invited to

contact the undersigned at the below-listed telephone number.

Respectfully Submitted, Stephen PALM

Bruce H. Bernstein

Reg. No. 29,027

Steven Wegman Reg. No. 31,438

March 15, 2005 GREENBLUM & BERNSTEIN, P.L.C. 1950 Roland Clarke Place Reston, VA 20191 (703) 716-1191

S. 2



Г

(조) E/D

EPAÆPOÆB D-80298 München

Inchen Pa

Europäisches Patentamt European Patent Office Office européen des brevets

#49 89 2399-0 TX 523 656 epmu d FAX +49 89 2399-4465

Generaldirektion 2

Directorate General 2

Direction Générale 2

Hiltl, Elmar, Dr.
DIEHL.GLAESER.HILTL & PARTNER,
Patentanwälte,
Augustenstrasse 46
80333 München
ALLEMAGNE

Telephone numbers:

+49 89 2399-7989

Primary Examiner (substantive examination)

Formalities Officer / Assistant (Formalities and other matters)

+49 89 2399-7588



COMMUNICATION SYSTEMS, INC.

## Communication pursuant to Article 96(2) EPC

The examination of the above-identified application has revealed that it does not meet the requirements of the European Patent Convention for the reasons enclosed herewith. If the deficiencies indicated are not rectified the application may be refused pursuant to Article 97(1) EPC.

You are invited to file your observations and insofar as the deficiencies are such as to be rectifiable, to correct the indicated deficiencies within a period

### of 4 months

from the notification of this communication, this period being computed in accordance with Rules 78(2) and 83(2) and (4) EPC.

One set of amendments to the description, claims and drawings is to be filed within the said period on separate sheets (Rule 36(1) EPC).

Failure to comply with this invitation in due time will result in the application being deemed to be withdrawn (Article 96(3) EPC).



Stolte, N Primary Examiner for the Examining Division

Enclosure(s):

5 page/s reasons (Form 2906)

NR. 686

Notification/Procès-verbal (Annexe)

Bescheid/Protokoll (Anlage)

Communication/Minutes (Annex)

S. 3

Datum Date Date

20.01.2005

Sheet Feuille 1

Anmelde-Nr.: Application No.: 03 028 106.7 Demande nº:

The examination is being carried out on the following application documents:

Description, Pages

1-60

as originally filed

Claims, Numbers

1-92

received on

17.03.2004 with letter of 17.03.2004

Drawings, Sheets

1/10-10/10

as originally filed

The following documents (D) are referred to in this communication; the numbering will be adhered to in the rest of the procedure:

- D1: 'Procedures for the identification and selection of common modes of operation between data circuit-terminating equipments (DCEs) and between data terminal equipments (DTEs) over the general switched telephone network and on leased point-to-point telephone-type circuits, ITU-T V.8 bis' ITU-T RECOMMENDATION V.8 BIS (08/96), August 1996 (1996-08), pages 1-43, XP002257025
- D2: US-A-5 493 609 (DAVIS RICHARD A ET AL) 20 February 1996 (1996-02-20)
- D3: KRECHMER K: 'V.34 MODEMS: OFF TO A FAST START?' DATA COMMUNICATIONS, MCGRAW HILL. NEW YORK, US, vol. 23, no. 2, 21 January 1994 (1994-01-21), pages 63-64,66, XP000418331 ISSN: 0363-6399

9))

Bescheid/Protokoil (Anlage)

Communication/Minutes (Annex)

Notification/Proces-verbal (Annexe)

Datum Date Date

20.01.2005

Blatt Sheet Feuille

2

Anmelde-Nr.:
Application No.: 03 028 106.7
Demande no:

# I - Objections with respect to Article 76 and 123 EPC

- 1. It seems that the application does not meet the requirements of Article 76(1) EPC since it seems to contain subject-matter which has not been disclosed in the earlier application (application number 99914300.1). The subject-matter which appears to be added is the following:
  - a. The wording "selectively connectable" (present claims 1, 17, 33, 40) seems to have no basis in the earlier application.
  - b. The wording "being hierarchically stored" (present claims 12, 48, 60) seems to have no basis in the earlier application. In the earlier application it was only disclosed that there are parameters having sub-parameters, and other parameters not having sub-parameters (page 46, 4-9), like a tree-structure. However, as hierarchically can also be construed as referring to the importance of the data (more and less important data), there is no basis in the earlier application for the wording "being hierarchically stored".

The Applicant is requested to point out the basis in the earlier application of the subject-matter which is claimed or to amend the claims accordingly.

- 2. Furthermore, the application appears to not meet the requirements of Article 123(2) EPC.
  - a. The applicant has deleted all features relating to the identification and standard information field and also the way in which the data is stored from the independent claims. It is not apparent whether there is a basis for such a deletion. The applicant is requested to show that all points (i) to (iii) mentioned in the Guidelines C-VI-5.3.10 are satisfied. In particular, the applicant is requested to show that the application as filed unambiguously discloses that the MS signal may be transmitted without an identification and a standard information field.
  - b. The application as filed does not disclose any "communicator" (claims 1, 17, 33, 40).
  - c. Present claims 1, 17, 33, 40, 53, 65, 74, 81 seek protection for a system/method, in which a plurality of (possibly different) CLR/CL/MS signals, carrying (some) identical data, are transmitted on different carriers.
    - It is not apparent whether the application as filed discloses that "said plurality of CLR signals carry identical data with identical timing but having

Demande nº:

Feuille



Date

Bescheid/Protokoll (Anlage)

Communication/Minutes (Annex)

Notification/Proces-verbal (Annexe)

Datum
Date 20.01.2005

Blatt
Sheet 3

Anmelde-Nr.:
Application No.: 03 028 106.7

different carrier frequencies", as claimed in claims 1, 17, 33, 40, 53, 65, 74, 81. The same applies to the wording "MS signal carrying identical data with an identical timing but having different carrier frequencies".

Although on page 34, lines 11-13 it is disclosed that identical <u>data</u> with identical timing is transmitted on all carriers, it is not specified in this passage what is transmitted on these carriers, ie. which "data" is transmitted. It is questionable whether a skilled-person can <u>unambiguously</u> derive from the description that the CL, CLR and MS signals is transmitted with identical timing on different carrier frequencies. It appears that in the whole description there is no link between the "data" on page 34, lines 11-13 and the CL, CLR and MS signals.

- ii. Furthermore, it is not apparent whether there is any basis for a claim claiming that on the different carriers different CL/CLR/MS are transmitted, which merely carry (some) identical data. Assuming the wording on page 34 forms a basis, according to the wording on page 34, lines 11-13, identical signals are transmitted on all carriers, but not different signals carrying some identical data.
- d. Although on page 21, line 11 it is referred to duplex communication, a "full duplex communication" as claimed in claims 53, 65, 74, 81 has not been disclosed.
- 3. For the sake of procedural efficiency, the applicant is requested to indicate for each claimed feature a basis in the parent and the filed divisional application (Guidelines E-II-1)

## II - Objections with respect to Article 84 EPC

- 4. The application does not meet the requirements of Article 84 EPC.
  - a. The claims are not concise. There are 4 independent claims in the category of apparatus, i.e. claims 1, 17, 33 40, and 4 independent claims in the category of method, ie. claims 53, 65, 74, 81. Of these claims, two claims in each category are directed to the central location, and two claims in each category are directed to the remote location. The definitions of the invention given in these independent claims are such that the claims as a whole are not concise, contrary to Article 84 EPC, in particular since the subject matter represented in

21. FEB. 2005 16:19

Bescheid/Protokoll (Anlage)

Communication/Minutes (Annex)

Notification/Procès-verbal (Annexe)

Datum Date Date

20.01.2005

Blatt Sheet Feuilie

4

Anmelde-Nr.: Application No.: 03 028 106.7 Demande no:

the different claims overlaps to such an extent that they could have easily been formulated as a single independent claims and dependent claims as appropriate.

Under Article 84 in combination with Rule 29(2) EPC an application may contain more than one independent claim in a particular category only if the subject matter claimed falls within one or more of the exceptional situations set out in paragraphs (a), (b) or (c) of Rule 29(2) EPC. As indicated above, one independent apparatus and method claim for each location appears to be justified and sufficient.

The claims should be recast to include for each location only one independent apparatus and method claim, Rule 29(2) EPC, with dependent claims as appropriate, Rule 29(4) EPC.

- Due to the multiple independent claims in the apparatus category the set of b. claims as a whole further lacks clarity due to the complete lack of consistency between the independent claims in defining the essential features of the invention.
- The independent device claims 1, 17, 33, 40, 53, 65, 74, 81 do not meet the 5. requirements of Article 84 EPC for the following reasons:
  - a. The expression "selectively connectable" (claims 1, 17, 33, 40) is not clear, as it is not defined what is selected. It is not clear whether "selectively" refers to the selection of the type of connection, or to the selection to which device the communication apparatus is connected.
  - The wording "... with an identical timing" (see eg. claim 1, line 33) leaves the b. reader in doubt whether the CLR signals are transmitted such that transmission starts and ends at the same time instance, or whether the symbol clock (ie. the duration of the binary ones and zeros) of each of the negotiation data is equal. Hence, the subject-matter is not clear.

The same objection equally applies to the wording of claims 17, 33, 40, 53, 65, 74, 81.

With respect to the wording "full duplex communication" (claims 53, 65, 74, 81) C. it is not understood what is meant with "full", as a "partial duplex communication" does not exist. Moreover, the claimed methods do not define any method steps of performing any duplex communication. Only the 21. FEB. 2005 16:20

DIEHL GLAESER HILTL

NR. 686

S.

Bescheid/Protokoll (Anlage)

Communication/Minutes (Annex)

Notification/Procès-verbal (Annexe)

Datum Date Date

20.01.2005

Blatt Sheet Feuille

5

Anmelde-Nr.:

Application No.: 03 028 106.7 Demande nº:

handshaking steps prior to the duplex communication are defined. In addition, the wording "performing a duplex communication from a remote ... to a central ... apparatus" renders the meaning of the word "duplex" obscure, as a duplex communication is always done between two devices, ie. in both directions, and not from one device to another device.

In general, the wording of each of the claims 53, 65, 74, 81 fails to define which d. method steps are carried out at the remote and which at the central communication apparatus, or in other words within which device the claimed method steps are carried out.

#### III - Final Remarks

In view of the above objections, especially in section I, no examination with respect to Article 52, 54 and 56 EPC is carried out.

. During revision of the application, due care should be taken not to add any subject-matter which extends beyond the content of the application as originally filed (Article 123(2) EPC).

In order to expedite the procedure, the Applicant is requested to clearly mark the amendments carried out, be it for amendments by addition, replacement or deletion and to indicate on which parts of the originally filed application documents these amendments are based (cf. Guidelines E-II-1).

In addition to the filing of a fair copy of the amended documents in triplicate an indication of the amendments could be done in hand written form on copies of the concerned parts of the originally filed application documents.